## ARIZONA GAME AND FISH DEPARTMENT HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract Element Code: PDCAC0X0G8

**Data Sensitivity:** Yes

### CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

**NAME:** Escobaria vivipara var. rosea (Clokey) D.R. Hunt,

COMMON NAME: Viviparous Foxtail Cactus, Rose Beehive Cactus, Spinystar Pincushion

Cactus, Spinystar

**SYNONYMS:** *Coryphantha rosea, Coryphantha vivipara* var. *rosea* (Clokey) L. Benson

Mammillaria vivipara var. rosea

**FAMILY:** Cactaceae

**AUTHOR, PLACE OF PUBLICATION:** *Escobaria vivipara* var. *rosea*(Clokey) D.R. Hunt, Cact. Succ. J. Gr. Brit., 40(1): 13. 1978. *Coryphantha rosea* Clokey, Madroño 7: 75. 1943.

**TYPE LOCALITY:** USA, Nevada, Clark County, Charleston Mountains, between Kyle Canyon & Dave Creek, 2400 m.

**TYPE SPECIMEN:** IT: F (sn). I.W. Clokey 8038, 24 June 1938, Nevada, USA. Additional Isotypes: ARIZ, GH, NY, US.

**TAXONOMIC UNIQUENESS:** Variety *rosea* is 1 of 9 varieties in the species *Escobaria vivipara*, and 1 of 7 in Arizona. The other varieties in the state include *arizonica*, *bisbeeana*, *buoflama*, *deserti*, *kaibabensis*, and *vivipara* (NatureServe 2004). Although most botanists refer to this plant as *Escobaria vivipara* var. *rosea* (Clokey) D.R. Hunt (including Nevada Native Plant Society, University of California under Jepson Manual, CalFlora, USDA PLANTS Database, ITIS, etc.), a few still follow it under the genus *Coryphantha*.

**DESCRIPTION:** Succulent cacti with 1-several ovoid-globular stems, 7-18 cm (2.8-7 in) long, 7-15 cm (2.8-6 in) in diameter; central spines 10-12, white with pink to red colored tips, 2-2.5 cm long; radial spines 12-18, white, 1-2 cm long. Spines completely obscure the stem. Plants are often described as a solitary, light-colored, spiny ball. Flowers 3-5 cm (1.2-2 in) in diameter, narrowly lanceolate, magenta to rose to purplish colored, forming a circle near the top of the plant. Fruit is green with a reddish upper half, 2-3 cm (0.8-1.2 in) long and 1.5 cm in diameter. Seeds are brown and kidney shaped, 2 mm long.

**AIDS TO IDENTIFICATION:** Central spines in var. *deserti* is < 8; perianth straw-yellow, or pink. Stems in *E. alversonii* are 6-8 cm (2.3-3.1 in) in diameter, cylindric; flowers 3 cm (1.18 in) in diameter, magenta to pink. (Hickman, 1993).

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For the species: "Coryphantha vivipara flowers are virtually identical to those of C. macromeris and Mammillaria wrightii; in the absence of vegetative material, flowers may be unidentifiable. Some unrelated species, such as C. echinus, vegetatively resemble C. vivipara, but those particular species usually have some of the central spines slightly curved, a few areolar glands present, or no medullary vascular system. The large lenticular druses (to 1 mm wide) in the pith and cortex of C. vivipara are shared only with C. sneedii." (eflora.org).

**ILLUSTRATIONS:** Line drawing (Hickman, 1993: p. 453).

Line drawing (Mozingo and Williams, 1980: p. 66). Photo (Holland, Niles and Schramm, 1980: Plate 5).

Line drawing (Holland, Niles and Schramm, 1980: Fig. 10).

Color photo of Isotype (In MO, at

http://mobot.mobot.org/cgi-bin/search\_vast?onda=N05100231).

Color photos of Isotype (*In* NYBG at <a href="http://scisun.nybg.org:8890/searchdb/">http://scisun.nybg.org:8890/searchdb/</a>)
Color photos of plant in flower (Margaret Williams, Nevada Native Plant Society, <a href="http://plants.usda.gov/cgi\_bin/plant\_profile.cgi?symbol=ESVIR2">http://plants.usda.gov/cgi\_bin/plant\_profile.cgi?symbol=ESVIR2</a>).

Color photo (James M. Andre 2004, in CalPhotos at

http://elib.cs.berkeley.edu/cgi/img\_query?enlarge=0000+0000+0204+0512)

**TOTAL RANGE:** Northwestern Arizona, California (San Bernardino County) and southern Nevada (Clark and Lincoln counties). "...most of south New Mexico, and west and central Texas." were included in range by Andrew Cooper at <a href="http://www.whitethornhouse.com/cact/cacti10-15.htm">http://www.whitethornhouse.com/cact/cacti10-15.htm</a>, which is incorrect for this variety.

**RANGE WITHIN ARIZONA:** Near Peach Springs, Mohave County.

## **SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Perennial (stem succulent) shrub/subshrub.

**PHENOLOGY:** Flowers June and July.

**BIOLOGY:** 

**HABITAT:** Dry, rocky limestone slopes, volcanic hills, and gravelly areas in woodland or desert mountains. Isotype found on gravelly slope and bottom with *Cercocarpus ledifolius* and *Pinus monophylla*.

**ELEVATION:** 4,918 – 9,000 ft (1500-2745 m). Collected in Arizona in 1940 at 3,900 feet

(1190 m).

**EXPOSURE:** Collected on west-facing slope in Arizona.

**SUBSTRATE:** Limestone, gravel. At Isotype, gravelly slope and bottom.

**PLANT COMMUNITY:** Creosote Bush Scrub, Pinyon-Juniper Woodland (CalFlora, 2002). In Arizona, collected on a low edge of the Juniperus zone. Associated plants include: Agave sp., *Artemisia nova* (black sagebrush), *Bromus rubens* (red brome), *Ceanothus* sp. (whitethorn), *Cercocarpus ledifolius* (curl-leaf mountain-mahogany), *Coleogyne ramosissima* (blackbush), *Purshia stansburiana* (Stansbury cliff-rose), *Ephedra nevadensis* (Nevada Mormon-tea), *Gutierrezia* sp. (snakeweed), *Ericameria linearifolia* (narrow-leaf golden-weed), *Juniperus osteosperma* (Utah juniper), and *Pinus monophylla* (single-leaf pine).

**POPULATION HISTORY AND TRENDS:** Known from 61 occurrences in Nevada, however, the number of occurrences in California and Arizona is unknown (NatureServe 2004). CalFlora (2005) reports 12 observations in San Bernardino County. The ARIZ herbarium has 1 collection from Mohave County, while the ASU herbarium has 2 collections.

### SPECIES PROTECTION AND CONSERVATION

**ENDANGERED SPECIES ACT STATUS:** None

STATE STATUS: Salvage Restricted under Coryphantha vivipara

var. rosea (ARS, ANPL 1999)

**OTHER STATUS:** Very Rare (CNPS 1997)

**MANAGEMENT FACTORS:** Like most cacti, it is subject to horticultural collecting. Disturbance of populations in Nevada (1980) were from livestock grazing, off-road vehicle use, illegal commercial and noncommercial collecting, forest fire, and land development (mining and urbanization).

PROTECTIVE MEASURES TAKEN:

**SUGGESTED PROJECTS:** 

LAND MANAGEMENT/OWNERSHIP:

# **SOURCES OF FURTHER INFORMATION**

#### **REFERENCES:**

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### MAJOR KNOWLEDGEABLE INDIVIDUALS:

### **ADDITIONAL INFORMATION:**

**Revised:** 2002-08-22 (SMS)

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